



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,185	04/01/2004	Masashi Murakami	2004-0524A	6426
513 7590 04/15/2009 WENDEROTH, LIND & PONACK, L.L.P. 1030 15th Street, N.W., Suite 400 East Washington, DC 20005-1503				
EXAMINER				
DURNFORD GESZVAIN, DELLON				
ART UNIT		PAPER NUMBER		
2622				
MAIL DATE		DELIVERY MODE		
04/15/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/814,185

**Applicant(s)**

MURAKAMI ET AL.

**Examiner**

Dillon Durnford-Geszvain

**Art Unit**

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21, 22 and 36 is/are rejected.
- 7) ☒ Claim(s) 23-35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. Claims **21-36** are pending, claims **1-20** are cancelled, and claims **21-36** are newly added.

***Response to Arguments***

2. Applicant's arguments with respect to claim **21** and **36** have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 102***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. **Claims 21 and 36 rejected under 35 U.S.C. 102(b) as being anticipated by US 6,798,451 (Suzuki).**
5. As to claim **21**, Suzuki teaches an image sensor comprising:
  - a sensor unit 21 (Fig. 1) having a plurality of pixels 11;
  - a first scanning circuit 28 for normal scanning (C3 L56-65), having a dynamic logic circuit for outputting one or more first selection signals ( $\Phi V_n$ , for example) for selecting pixels from among said plurality of pixels in said sensor unit (C4 L6-13);
  - a second scanning circuit 29 for use as an electric shutter (C3 L56-65), having a dynamic logic circuit for outputting one or more second selection signals ( $\Phi S_{n+1}$  for example) for selecting pixels from among said plurality of pixels in said sensor unit (C4

L14-22); and

one or more selection circuits (the logic between the scanning circuits and the sensor), each configured to receive a first selection signal from among said one or more first selection signals and a second selection signal from among said one or more second selection signals (Fig. 1), each selection circuit comprising:

a first bootstrap circuit ( $33_n$ ) configured to hold the received first selection signal  $\Phi V_n$ , and to output a first AND signal obtained by performing a logical AND between the held first selection signal and a first drive signal (from TG 30), thereby specifying a timing to output the first AND signal; and

a second bootstrap circuit ( $33_{n+1}$ ) configured to hold the received second selection signal ( $\Phi S_{n+1}$ ), and to output a second AND signal obtained by performing a logical AND between the held second selection signal and a second drive signal (also from TG 30, but at a different time because the electronic shutter and the normal scanning are not carried out at the same time), thereby specifying a timing to output the second AND signal,

wherein each selection circuit of said one or more selection circuits outputs the first AND signal and the second AND signal to said sensor unit (Fig. 1).

6. Claim 36 is a method for operating the sensor of claim 21 and is rejected on similar grounds but drawn to a method.

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
8. Claim **22** is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,798,451 (Suzuki) in view of the Examiner's Official Notice.
9. As to claim **22**, Suzuki does not explicitly teach the image sensor as part of a camera having a housing. However, the Examiner takes Official Notice that it was notoriously old and well known at the time the invention was made to use solid state sensors in cameras that have a housing. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the solid state imager of Suzuki in a camera with a housing as this would allow for the sensor to be used to capture images of objects.

***Allowable Subject Matter***

10. Claims **23-35** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
11. The following is a statement of reasons for the indication of allowable subject matter:
12. As to claim **23**, the cited prior art neither anticipates nor renders obvious the claimed limitation of the sensor of claim **21** where the first and second bootstrap circuits are implemented as claimed in claim **23**.

13. Claims **24-35** depend either directly or indirectly from claim **23** and are objected to as depending from a claim that contains allowable subject matter.

### ***Conclusion***

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dillon Durnford-Geszvain whose telephone number is (571)272-2829. The examiner can normally be reached on Monday through Friday 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DDG

4/11/2009

/David L. Ometz/  
Supervisory Patent Examiner, Art Unit 2622